

24(0)

PHASE I BOOK EXPLOITATION

SOV/2299

Dimentberg, Fedor Menas'yevich

Izgibnyye kilebaniya vrashchayushchikhsya valov (Flexural Vibrations
(Whirling) of Rotating Shafts) Moscow, Izd-vo AN SSSR, 1959. 246 p.
(Series: Problemy teorii mashin) 3,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya.

Ed.: S.V. Serensen, Academician Ukrainian Academy of Sciences;
Ed. of Publishing House: A.S. Meleyev; Tech. Eds.: N.K. Kuz'man,
and Ye. V. Makunin; Editorial Board of Series: I.I. Artobolevskiy,
Academician (Resp. Ed.), A.A. Blagonravov, Academician, N.G. Bruye-
vich, Academician, V.I. Dikushin, Academician, S.V. Serensen,
Academician, Ukrainian Academy of Sciences, S.V. Pinegin, Doctor
of Technical Sciences, Professor, N.I. Levitskiy, Doctor of Techni-
cal Sciences, Professor, F.M. Dimentberg, Doctor of Technical
Sciences, A.Ye. Kobrinskiy, Doctor of Technical Sciences, N.P.
Rayevskiy, Candidate of Technical Sciences, and A.P. Bessonov,
Candidate of Technical Sciences (Academic Secretary).

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Flexural Vibrations (Cont.)

SOV/2299

PURPOSE: The book is intended for scientific and engineering personnel of the machine-building industry and for stress analysts and designers of new types of machines.

COVERAGE: The book discusses natural frequencies of shafts, the whirling; critical speeds under various support conditions, effect of the weight of the shaft itself and the vibrations of its supports, the unsteady passing of a shaft through critical speeds, influence of internal and external friction and the stability of motion due to the action of friction. Problems of whirling, methods of balancing, evaluation of stability between critical speeds and strength in long-time operation and often-repeated starts are analyzed. No personalities are mentioned. There are 52 references: 31 Soviet, 12 English, 5 German, 2 Rumanian, 1 Czech and 1 Slovak.

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1. Elements of the flexural vibration (whirling) of a rotating shaft	15

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DIMENTBERG, F.M.

ARTOBOLVSKIY, Ivan Ivanovich, akademik; LEVITSKIY, N.I., prof., doktor tekhn.nauk, otv.red.; BLAGONRAVOV, A.A., akademik, red.; BRUYEVICH, N.G., akademik, red.; DIKUSHIN, V.I., akademik, red.; SERENSEN, S.V., akademik, red.; PINEGIN, S.V., prof., doktor tekhn.nauk, red.; DIMENTBERG, F.M., doktor tekhn.nauk, red.; KOBRINSEIY, A.Ye., doktor tekhn.nauk, red.; RAYEVSKIY, N.P., kand.tekhn.nauk, red.; BESSONOV, A.P., kand.tekhn.nauk, red.; PERLYA, Z.N., red.izd-va [deceased]

[Theory of mechanisms for reproduction of flat curves] Teoriya mekhanizmov dlia vosproizvedeniia ploskikh krivyykh. Moskva, Izd-vo Akad.nauk SSSR, 1959. 253 p. (MIRA 12:8)

1. AN USSR (for Serensen).
(Drawing instruments)

DIMENTBERG, F.M., doktor tekhn.nauk; LYUKSHIN, V.S., kand.fiz.-mat.nauk;
 NIBERG, N.Ya., kand.tekhn.nauk; OBMORSHEV, A.N., prof., doktor
 tekhn.nauk; PLUZHNIKOV, I.S., kand.fiz.-mat.nauk; UMANSKIY, A.A.,
 prof., doktor tekhn.nauk; ACHERKAN, N.S., prof., doktor tekhn.nauk,
 red.; VUKALOVICH, M.P., prof., doktor tekhn.nauk, laureat Leninskoy
 premii, red.; KUDRYAVTSEV, V.N., prof., doktor tekhn.nauk, red.;
 PONOMAREV, S.D., prof., doktor tekhn.nauk, laureat Leninskoy premii,
 red.; SATEL', B.A., prof., doktor tekhn.nauk, red.; SERENSEN, S.V.,
 akademik, red.; RESHETOV, D.N., prof., doktor tekhn.nauk, red.; GIL'DEN-
 BERG, M.I., red.izd-va; SOKOLOVA, T.F., tekhn.red.

[Reference book for machinery designers in six volumes] Spravochnik
 mashinostroitelia; v shesti tomakh. Red.sovet: N.S.Acherkan i dr.
 Izd.3., ispr. i dop. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.
 lit-ry. Vol.1. Pod red.N.S.Acherkana. 1960. 592 p. (MIRA 13:10)

1. AN USSR (for Serensen). (Machinery--Design)

GUSAROV, A.A.; DIMENTBERG, F.M.

~~SECRET~~
Balancing of flexible rotors with distributed and concentrated
masses. Probl.proch.v mashinostr. no.6:5-37 '60. (MIRA 13:9)
(Balancing of machinery)
(Rotors)

BANAKH, L.Ya.; DIMENTBERG, F.M.; ZVINOGRODSKIY, N.V.

Vibrations of a heavy shaft with distributed mass in the presence
of a gap in one of the bearings. Probl.proch.v mashinostr.
no.6:68-88 '60. (MIRA 13:9)

(Shafting--Vibration)

VASIL'YEVA, R.V., inzh.; GUSAROV, A.A., kand.tekhn.nauk; ~~DIMENTRIK~~.
F.M., doktor tekhn.nauk; TSEKHANSKIY, E.R., inzh.

Experimental balancing of a flexible shaft in a model unit.
Vest.mash. 40 no.9:27-31 S '60. (MIRA 13:9)

(Balancing of machinery)

GROBOV, Valerian Aleksandrovich; ARMOBOLEVSKIY, I.I., akademik, otv. red.;
DIKUSHIN, V.I., akademik; red.; SERENSEN, S.V., akademik, red.;
PINEGIN, S.V., doktor tekhn. nauk, prof., red.; LEVITSKIY, A.I.,
doktor tekhn. nauk, prof., red.; DIMENTBERG, F.M., doktor tekhn.
nauk, red.; KOBRINSKIY, A.Ye., doktor tekhn. nauk, red.;
RAYEVSKIY, N.P., kand. tekhn. nauk, red.; BESSONOV, A.P., kand. tekhn.
nauk, red.; ORPIK, S.L., red. izd-va; LAUT, V.G., tekhn. red.

[Asymptotic methods for calculating bending vibrations of turbo-
machine rotors] Asimptomicheskie metody rascheta izgibnykh ko-
lebanii valov turbomashin. Moskva, Izd-vo Akad. nauk SSSR,
1961. 165 p. (MIRA 14:5)

1. Akademiya nauk USSR (for Serensen)
(Impellers—Vibration)

S/179/60/000/006/013/036
E191/E135

26.2120

AUTHORS: Banakh, L.Ya., and Dimentberg, F.M., (Moscow)

TITLE: Flexural Vibrations of a Rotating Shaft Carrying a Component in Which the Values of the Principal Central Mass Moment of Inertia are Unequal

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1960, No. 6, pp. 91-97

TEXT: The component, for example, a solid disc with a broad recess milled across the face has three different principal mass moments of inertia. It is assumed mounted in the centre of the shaft which is simply supported on two bearings. One principal axis of inertia of the disc coincides with the shaft axis. The other two principal axes of the disc coincide with the two principal axes of the shaft stiffnesses, which are also unequal. In the presence of both external and internal friction, there are several separate regions of instability. These are examined geometrically in the space of the complex stability parameter,

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Flexural Vibrations of a Rotating Shaft Carrying a Component in which the Values of the Principal Central Mass Moment of Inertia are Unequal

namely the ratio of the coefficients of the internal and external friction. The displaced position of the component is defined with reference to different axes. The Lagrange functions are formulated. The internal friction is assumed to be proportional to the relative angular velocity of rotation about a transverse axis of the cross-section of the shaft. The external friction moment is proportional to the absolute angular velocity of rotation of the component about a transverse axis. The dissipation function is formulated and the equations of flexural vibrations of the shaft are stated. Substitution of complex exponential functions as solutions leads to the characteristic frequency equation. This equation is quadratic in the ratio of damping coefficients. Examination of the stability region proceeds by studying the complex plane of the damping coefficient ratio. In the general case, there are either four or two

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Flexural Vibrations of a Rotating Shaft Carrying a Component in Which the Values of the Principal Central Mass Moment of Inertia are Unequal

non-zero solutions of the frequency equation but there are always four regions of stability. A numerical example is given. Two special cases are considered, namely when the mass moment of inertia about the shaft axis is zero, and when it is equal to the sum of the remaining mass moments of inertia. In the latter case, the motion is stable.

There are 9 figures and 2 references: 1 Soviet and 1 German. VC

SUBMITTED: April 15, 1960

Card 3/3

BANAKH, L.Ya. (Moskva); DIMENTBERG, F.M. (Moskva); ZVINOGRODSKIY, N.V.
(Moskva)

Origination of a parametric resonance in a horizontal shaft with
a weight and supported by a bearing with a radial gap. Izv.AN
SSSR.Otd.tekh.nauk.Mekh.i mashinostr. no.6:159-162 N-D '61.
(MIRA 14:11)

(Shafting)

AGAMIROV, V.L., kand. tekhn. nauk; AMEL'YANCHIK, A.V., inzh.;
ANDREYEVA, L.Ye., kand. tekhn. nauk; BIDERMAN, V.L., doktor
tekhn. nauk; BOYARSHINOV, S.V., kand. tekhn. nauk; VOL'MIR,
A.S., prof., doktor tekhn. nauk; DIMENTBERG, F.M., doktor
tekhn. nauk; KOSTYUK, A.G., kand. tekhn. nauk; MAKUSHIN, V.M.,
kand. tekhn. nauk; MASLOV, G.S., kand. tekhn. nauk; MALININ,
N.N., prof., doktor tekhn. nauk; PONOMAREV, S.D., prof. doktor
tekhn. nauk; PRIGOROVSKIY, N.I., prof., doktor tekhn. nauk;
SERENSEN, S.V., akademik; STEPANOVA, V.S., inzh.; STRELYAYEV,
V.S., inzh.; TRAPEZIN, I.I., prof., doktor tekhn. nauk;
UMANSKIY, A.A., prof., doktor tekhn. nauk; FEODOS'YEV, V.I.,
prof., doktor tekhn. nauk; SHATALOV, K.T., doktor tekhn. nauk;
YUMATOV, V.P., kand. tekhn. nauk; BLAGOSKLONOVA, N.Yu., red.
izd-va; YEVSTRAT'YEV, A.I., red. izd-va; SOKOLOVA, T.F.,
tekhn. red.

[Manual for a mechanical engineer in six volumes] Spravochnik
mashinistroitelia v shesti tomakh. Red. sovet N.S.Acherkan i
dr. Izd.3., ispr. i dop. Moskva, Mashgiz. Vol.3. 1962. 651 p.
(MIRA 15:4)

1. Akademiya nauk USSR (for Serensen).
(Machinery--Design)

KUSHUL', Mikhail Yakovlevich; DIMENTBERG, F.M., doktor tekhn. nauk,
otv. red.; LETNEV, B.Ya., red. izd-va; GRIGOR'YEVA, Ye.K.,
tekhn. red.

[Natural vibrations of rotors; dynamics of high-speed
spindles] Avtokolebaniia rotorov; dinamika bystrokhodnykh
vereten. Moskva, Izd-vo Akad.nauk SSSR, 1963. 164 p.

(MIRA 16:4)

(Rotors--Vibration)

DIMENTBERG, F.M. (Moscow):

"Modern developments in the theory of balancing flexible rotors."

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 64.

DIMENTBERG, F.M.; SHATALOV, K.T.; GUSAROV, A.A.; ZHITOMIRSKIY, V.M.,
doktor tekhn. nauk, retsenzent; DANILOV, L.N., inzh., red.

[Vibrations of machinery] Kolebaniia mashin. Moskva, Mashino-
stroenie, 1964. 307 p. (MIRA 17:8)

AVER'YANOVA, V.G. (Moskva); DIMENTBERG, F.M. (Moskva)

Geometrical interpretation of the vibration of an elastically
suspended solid. Izv. AN SSSR Mekh. i mashinostr. no.6:10-19
N-D '64. (MIRA 18:2)

L 20212-65 EWT(m)/EWT(w) ASD(f)-3/ASD(p)-3 EM

ACCESSION NR: APL049494

S/0122/64/000/011/0007/0014

AUTHOR: Dimen/berg, F. M. (Doctor of technical sciences, Professor)

TITLE: Present status of flexible rotor balancing theory

SOURCE: Vestnik mashinostroyeniya, no. 11, 1964, 7-14

TOPIC TAGS: rotor design, rotor vibration, critical speed

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ABSTRACT: The state of the art of the theory of flexible rotor balancing is reviewed by discussing the contributions of 26 references. Twenty-two of these references are primarily concerned with a flexible rotor on two supports, in which case various methods for finding the optimum location of compensating masses have been proposed; most of them are based on compensating for the first two vibration modes (for example, S. I. Milunis. O balansirovke gibkikh rotorov deystvuyushchikh turbogeneratorov. "Vestnik mashinostroyeniya," 1959 No. 12). A general method for balancing flexible rotors having n masses and N supports was proposed by J. P. DenHartog (The Balancing of Flexible Rotors. A Book "Air, Space and Instruments" dedicated to 60th Birthday, Prof. Stark Draper, New York, 1963) in which it was found that $n + N$ weights are needed to balance the rotor at any speed. It was also found that $2 + k$ weights are required to balance a rotor for k vibration modes or

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ACCESSION NR: APL404949

k critical speeds. A strict mathematical treatment of the same problem (with stiff or elastic supports) was performed by E. Huebner (Das Auswuchten elastischer Rotoren, ein Problem der Strukturanalyse. Ing.-Archiv, Bd. XXX, 1961, No. 5) and the most recent work by E. Julius (Vychisleniye staticheskoye neustoičivost' uloženych rotorov, Strojirenstvi, 1964, No. 1) derived the same results as Den Hartog without the latter's simplifying assumptions. M. A. Kushul' and A. V. Shlyakhtin (Uravnoveshivaniye gibkikh rotorov, Izvestiya AN SSSR, Mekhanika i mashinostroyeniye, 1961, No. 2) have developed a method in which, in addition to compensation for the lower vibration modes, other conditions (for example, elimination of higher harmonic effects) can be satisfied. (Orig. art. has: 7 formulas and 8 figures.

ASSOCIATION: none

SUBMITTED: 00

SUB CODE: PR

NO REF SOV: 015

ENCL: 00

OTHER: 011

Card 2/2

AYER'YANOVA, V.G. (Moskva); D'IMENTBERG, F.M. (Moskva)

Determining the displacement screw by the initial and final position
of the solid. Mashinovadenie no.2:13-17 '65.

(MIRA 18:8)

DIMENTBERG, F.M., doktor tekhn. nauk, prof., otv. red.

[Vibrations and strength at variable stresses] Kolebaniia i prochnost' pri peremennykh napriazheniiakh. Moskva, Nauka, 1965. 198 p. (MIRA 18:10)

1. Moscow. Institut mashinovedeniya.

DIMENTBERG, Fedor Menas'yevich; ANTONOV, I.I., red.

[Calculus of screws and its applications in mechanics]
Vintovoe ischislenie i ego prilozhenia v mekhanike.
Moskva, Nauka, 1965. 199 p. (MIRA 19:1)

LEVITSKIY, N.I., doktor tekhn. nauk prof., otv. red.; BLAGONRAVOV, A.A., akademik, red.; BESSONOV, A.P., doktor tekhn. nauk, red.; DIMENTBERG, F.M., doktor tekhn. nauk, prof., red.; ZINOV'YEV, V.A., doktor tekhn. nauk, prof., red.; KOBRINSKIY, A.Ye., doktor tekhn. nauk, red.; CHERKUDINOV, S.A., doktor tekhn. nauk, red.

[Current problems in the theory of machines and mechanisms] Sovremennye problemy teorii mashin i mekhanizmov. Moskva, Nauka, 1965. 342 p. (MIRA 19:1)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut mashinovedeniya.

ACC NR: AP7002929

SOURCE CODE: UR/0020/66/171/006/1293/1296

AUTHOR: Dimentberg, M. F.; Frolov, K. V.

ORG: Institute of Problems of Mechanics, AN SSSR, State Scientific Research Institute of Machines (Institut problem mekhaniki AN SSSR, Gosudarstvennyy nauchno-issledovatel'skiy institut mashinovedeniya)

TITLE: The Sommerfeld effect in a system with a randomly varying characteristic frequency

SOURCE: AN SSSR. Doklady, v. 171, no. 6, 1966, 1293-1296

TOPIC TAGS: elastic medium, oscillation, linear differential equation, approximation method

ABSTRACT: A study is made of the Sommerfeld effect observed in the oscillating behavior of a motor rotor supported elastically. Resonance properties of the linear oscillating system of differential equations, brought about by forces of inertia of an unbalanced rotor with random variation of the characteristic frequency, are studied. The solution indicates that the Sommerfeld effect may be reduced under certain conditions when the parameters are randomly varied; that is, the rotor may pass beyond the critical resonance state without the addition of supplemental energy to the motor. The method of averaging is used to find the mathematical expectations for the

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UDC: 531.395

ACC NR: AP7002929

substituted variables, the solution for which is given in standard form. Oscillograms are presented to show the results of experimental verification. Presented by Academician A. Yu. Ishlinskiy on 18 February 1966. Orig. art. has: 8 formulas, 2 figures.

SUB CODE: 13,12/

SUBM DATE: 11Feb66/

ORIG REF: 009/

OTH REF: 001

Card 2/2

DIMENTBERG M.F. (Moskva)

Forced vibrations of plates subjected to random loading depending
on space and time. Inzh.zhur. 1 no.2:97-105 '61. (MIRA 14:12)

1. Institut mekhaniki AN SSSR.
(Elastic plates and shells--Vibration)

S/879/62/000/000/043/088
D234/D308

AUTHOR: Dimentberg, M. F. (Moscow)

TITLE: Forced vibrations of panels subject to random loads

SOURCE: Teoriya plastin i obolochek; trudy II Vsesoyuznoy konferentsii, L'vov, 15-21 sentyabrya 1961 g. Kiev, Izd-vo AN USSR, 1962, 270-273

TEXT: A review of previous papers of the author himself and other authors. /Abstracter's note: possibly containing a summary of unpublished results, which is not expressly stated. There is 1 figure and 9 references.

Card 1/1

19811

S/179/62/000/003/013/015

E191/E435

10.7400
AUTHOR: Dimentberg, M.F. (Moscow)

TITLE: On the lower estimated limit of endurance life under stationary random stresses

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Mekhanika i mashinostroyeniye, no.3, 1962, 167-170

TEXT: The lowest estimated value for the endurance life is given for structures subject to cyclic stresses which constitute a stationary Gaussian random process. At first, the problem of the evaluation of the mean endurance life under a given cyclic stress is considered when this stress is a stationary random function of time. The mean value of this function can be assumed as zero without limitation of generality. If so, the spectrum of the stress amplitudes is continuous and the summation of fatigue stresses is replaced by integration over the amplitude levels. In most cases, the stress cycles are not all simple or symmetrical. An attempt is made to evaluate the endurance life by replacing an arbitrary process with a more damaging process

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On the lower estimated ...

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consisting of simple cycles which are nearly symmetrical. This will be an evaluation of a lower limit. The hypothesis of a linear summation of fatigue damage is employed. An expression is given for the expected service life. In this expression use is made of the fatigue curve obtained for symmetrical cycles which is substituted by a power curve. In random oscillations of a mechanical system with a single sufficiently sharp maximum of the amplitude-frequency characteristic, the probability of complex cycles is small. The derivations for the integrals required to determine the expected service life are given. In the event of a Gaussian process, V.V. Bolotin (Statistical methods in the theory of structures. Gosstroyizdat, 1961) obtained an approximate formula for the mean service life. In the limiting case of a narrow-band Gaussian process, the results of the present paper coincide with those of Bolotin. It follows that the Bolotin formula for the evaluation of endurance life at a stationary random stress having a normal distribution practically coincides with the lower estimated limit for all values of the parameters likely to be found in practice. There are 2 figures.

SUBMITTED: January 31, 1962
Card 2/2

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16.6300

S/179/62/000/005/006/012
E191/E135

AUTHOR: Dimentberg, M.F. (Moscow)

TITLE: Nonlinear oscillations of elastic panels under random loads

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Mekhanika i mashinostroyeniye, no.5, 1962, 102-110

TEXT: In earlier work (Inzh. Zhurnal, no.2, 1961) the problem of plates was considered by the present author with the help of correlation theory. Here, the analysis is applied to thin elastic panels. In thin panels, the normal deflections can be so large that the geometric nonlinearity may be significant. As shown by D.A. Smith and R.F. Lambert in their paper on the effects of dynamical nonlinearity on extremal statistics (J. Acoust. Soc. Amer., 32, no.12, 1960), the density of the probability of stress maxima for large amplitudes may turn out to be higher than those determined in accordance with the linear theory. The subject of this paper is the problem of determining the density of probability of deflection and stress extrema under

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f

Nonlinear oscillations of elastic... S/179/62/000/005/006/012
El91/El35

nonlinear oscillations of panels, which is associated with the problem of evaluating their dynamic strength. An effective method of analysing random processes in nonlinear systems is based on applying the theory of Markov processes and the equations of the Fokker-Planck-Kolmogorov type. Mostly, the excitation process is assumed as a "white noise". Recently, however, excitation spectra described by rational fraction functions have been considered. The excitation processes are found to be related to white noises by certain linear differential relationships which are taken into account when the Fokker-Planck-Kolmogorov equations are set up. This method has already been applied to automatic control systems. The method is applied here to determine the density of probability of extremal values. A thin, elastic, shallow, curved panel with a rectangular planform is considered. The normal deflection is commensurate with the panel thickness but small compared with the length of the edges. The equation of oscillatory motion is formulated, without taking dissipation forces into account. An approximate solution is sought by expanding in terms of special functions satisfying the boundary conditions for the deflection.

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Nonlinear oscillations of elastic ... S/179/62/000/005/006/012
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Making use of the Galerkin method, a system of ordinary differential equations is obtained. If the special functions are natural modes and the dissipation terms are introduced, the equations of the system contain the attenuation coefficients, the generalised coordinates, and the generalised forces. The latter are assumed to have spectral densities described by rational fraction functions which can be obtained by passing the white noises through linear filters with transfer functions described by similar rational fractions. The Fokker-Planck-Kolmogorov equations are set up. A freely supported circular panel is also considered. Some simpler cases are examined in greater detail. Relations are given for the mean number of extrema contained in a certain interval of values during a unit of time. Finally, it is found that nonlinearity increases the number of maxima for large amplitudes and decreases the number for small amplitudes. This result is in agreement with the experimental data of Smith and Lambert.

There are 7 figures.

SUBMITTED: April 2, 1962

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L 23067-66

EWI(m)/ENP(w)/ETC(m)-6

IJP(c) WW/EM

ACC NR: AP6011128

SOURCE CODE: UR/0424/66/000/001/0035/0040

AUTHOR: Dimentberg, M. F. (Moscow)

ORG: none

TITLE: Resonant properties of a system with one degree of freedom and randomly varying natural frequency

SOURCE: Inzhenernyy zhurnal. Mekhanika tverdogo tela, no. 1, 1956, 35-40

TOPIC TAGS: vibration analysis, vibration damping, forced vibration, random natural frequency

ABSTRACT: ^{26, 55}Forced vibrations of a system with one degree of freedom described by the differential equation

$$\frac{d^2x}{dt^2} + 2\alpha \frac{dx}{dt} + \omega_0^2 [1 + \epsilon \xi(t)] x = a \cos \omega_0 t \quad (1)$$

where ω_0 is the mean natural frequency of the system, α is the damping factor ($\alpha \ll \omega_0$), ϵ is a small parameter, and $\xi(t)$ is a stationary random function, are analyzed. Statistical characteristics of the random function $\xi(t)$ are sought such that they will ensure an effective and stable decrease of the amplitude of resonant vibrations. It is assumed that the average zero value and the correlation function

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ACC NR: AP6011128

$K(\tau)$ of $\xi(t)$ are given. Function $x(t)$ is represented in the form of a power series

$$x(t) = x_0(t) + \varepsilon x_1(t) + \varepsilon^2 x_2(t) + \dots \quad (2)$$

By substituting the series (2) into equation (1), an infinite system of linear inhomogeneous differential equations with constant coefficients in functions x_i ($i = 1, 2, \dots$) are derived from which general expressions for $x_0(t)$ and $x_i(t)$ ($i \geq 1$) are obtained. Statistical characteristics of $x(t)$ (set averaged value $\langle x(t) \rangle$) are determined, using only the first three terms of expansion (2). On the basis of the derived expressions for $\langle x(t) \rangle$, it is shown that when the spectral density $\phi(\omega)$ of the stationary random function $\xi(t)$ for all $\omega > 0$ is continuous and $d\phi/d\omega \leq 0$, then such random variations of the natural frequency reduce, on the average, the amplitude of resonant vibrations. In the particular case when the correlation time τ of the random function $\xi(t)$ is small as compared with $1/\alpha$, the first approximation of the magnitude of the reduction in the amplitude of resonant vibration is proportional to the difference of the spectral densities of the process $\xi(t)$ at low frequencies (of the order α^2/ω_0) and at the frequency $2\omega_0$. The flexural vibrations of the elastic thin bar under the simultaneous action of a transverse load whose variation is proportional to $\cos \omega_0 t$ and a longitudinal load represented by a stationary random time function are cited as an example. The author thanks K. V. Frolov for useful remarks and discussions. Orig. art. has: 27 formulas. [LK]

SUB CODE: 20/ SUBM DATE: 06Sep65/ ORIG REF: 005/ ATD PRESS: 4234

Card 2/2 F.W

L 44442-66 EWT(d)/EWP(1) IJP(c)

ACC NR: AP6024195

SOURCE CODE: UR/0424/66/000/002/0178/0182

AUTHOR: Dimentberg, M. F. (Moscow)

ORG: none

31
B

TITLE: Amplitude-frequency ¹⁶characteristics of a system with randomly varying parameters

SOURCE: Inzhenernyy zhurnal. Mekhanika tverdogo tela, no. 2, 1966, 178-182

TOPIC TAGS: ordinary differential equation, random vibration, frequency characteristic

ABSTRACT: The statistical characteristics of the following type differential equation are investigated with regard to small, steady, random changes in its coefficients;

$$\frac{d^n x}{dt^n} + a_{n-1}[1 + \varepsilon \xi_{n-1}(t)] \frac{d^{n-1} x}{dt^{n-1}} + \dots + a_1[1 + \varepsilon \xi_1(t)] \frac{dx}{dt} + a_0[1 + \varepsilon \xi_0(t)] x = a_0 e^{i\omega_0 t}$$

As a first approximation, the "mean amplitude" of vibrations is determined from the modulus of $b(1 - \varepsilon^2 M)$, where

$$M = - \int_0^\infty G(u) e^{-i\omega_0 u} du \int_0^\infty e^{-i\omega_0 \tau} \left[\sum_{q=0}^{n-1} \sum_{k=0}^{n-1} (i\omega_0)^k s_k a_q K_{qn}(\tau) \frac{d^q G(\tau)}{d\tau^q} \right] d\tau$$

and b is a real constant. The different results on random coefficient changes are analyzed for even and odd orders in n. The following expression is derived to show the possibility of lowering the resonance amplitudes by a possible control of the

Card 1/2

L 44442-66

ACC NR: AP6024195

coefficients

$$M_R = \frac{1}{4a_r \Delta_r} \sum_{q=0}^{2n-1} (-1)^q a_q^2 \omega_0^{q-1} \sum_{k=1}^m \frac{\omega_k^{q-1}}{\Delta_k} [J_{qq,k}^- - (-1)^q J_{qq,k}^+]$$

A dispersion relation is obtained for the amplitude changes generated by random oscillations of the coefficients in the system. Orig. art. has: 29 equations.

SUB CODE: 20/ SUBM DATE: 12Oct65/ ORIG REF: 006

Card 2/2

DIMENTMAN, N.Ye.

~~Proposals by innovators of the Monino Combine. Tekst. prom. 15~~

no.5:42-43 Ny '55. (MIRA 8:6)

(Monino--Textile industry)

DIMENTMAN, N.Ye.

Remarkable initiative of the workers of Glukhovo Combine. Tekst. prom.
19 no.11:95 N '59. (MIRA 13:2)
(Moscow Province--Textile workers)

DIMENTMAN, N.Ye.

In the enterprises of Moscow Province. Tekst.prom. 20 no.3:7-8 Mr
'60. (MIRA 14:5)

(Moscow Province--Textile workers)

(Moscow Province--Cotton manufacture)

DIMENTMAN, N.Ye.

In honor of the 90th birthday of V.I. Lenin. Tekst.prom. 20
no. 4:89 Ap '60. (MIRA 13:8)
(Lenin, Vladimir Il'ich, 1870-1924)

ACC-NR: AM6019923

Monograph

UR/

Dimentova, Anna Aleksandrovna; Rekstin, Feliks Sergeyevich; Ryabov, Valentin Alekseyevich

Tables of gasodynamic functions ($k = 1.05-1.70$); a handbook (Tablitsy gazodinamicheskikh funktsiy ($k = 1.05-1.70$); spravochnoye posobiye) Moscow, Izd-vo "Mashinostroyeniye," 1966. 135 p. illus., biblio., tables. 5500 copies printed.

TOPIC TAGS: gas dynamics, mathematic table, *function analysis, pipe flow, gas flow*

PURPOSE AND COVERAGE: This reference manual contains tables of the values of the gas-dynamic functions over a wide range of values of the isentropic exponent ($k = 1.05-1.70$), which includes all real gases used at present, for values of the reduced velocity (the ratio of the velocity of the gas to the critical velocity) $\lambda = 0.01-1.8$. The functions tabulated here are: ζ —the ratio of velocities (the velocity of a gas to the maximum discharge velocity); $\pi(\lambda)$ —function of the ratio of pressures; $\tau(\lambda)$ —function of the ratio of temperatures; $c(\lambda)$ —function of the ratio of densities; $q(\lambda)$ —function of the reduced density of mass flow; $y(\lambda)$ —function of the static impulse of gas flow; $r(\lambda)$ —function of the relative static impulse; $j^*(\lambda)$ —function of the relative velocity head; M —the Mach number; Φ —the ratio of speeds of sound; and $z(\lambda)$ —function of the total reduced impulse. The values of

unc. 518.2

ACC NR: AM6019923

these functions were computed on a Ural digital computer. Formulas are given to illustrate the application of the tables in calculating the parameters of flows in pipes and open channels, in elements of ducts in turbines operating on various gases and gas mixtures. This book can be used in designing and studying power turbines and apparatus, and also in different fields of subsonic, sonic, and supersonic aerodynamics. As a reference manual, it is intended for workers in scientific research institutes and design bureaus who are engaged in gas-dynamic calculations and research; it may also be useful to university students studying the corresponding specialties.

TABLE OF CONTENTS [abridged]:

Foreword --	3
Notation --	5
Description of the functions and their basic properties --	7
Transformation of the fundamental equations of gas dynamics by the gas-dynamic functions --	17
Tables --	20
Constants used in the gas-dynamics functions --	133
Bibliography --	137

SUB CODE: 20/2/SUBM DATE: 19Jan66/ ORIG REF: 007

Card 2/2

DIMER, A. I.

Transportation of oil and petroleum products. Biul. tekhn.-
ekon. inform. Gos. nauch.-issl. inst. nauch. i tekhn. inform.
no.12:57-61 '62. (MIRA 16:1)

(Petroleum—Transportation)

(Petroleum products—Transportation)

L 17523-65

ENT(m)/ENP(j)

Pc-4 RM

ACCESSION NR: AP5002653

S/0095/64/000/010/0009/0012

AUTHOR: Dimer, A. I.; Zubov, N. M.; Klimovskiy, Ye. M.

TITLE: Investigation of the operation and applicability of pipeline scavenger plugs B

SOURCE: Stroitel'stvo truboprovodov, no. 10, 1964, 9-12

TOPIC TAGS: petroleum industry equipment, polyethylene plastic, pipeline components

ABSTRACT: The newly developed (in the USSR) cylindrical pipeline scavenger plugs are used to drive water out of pipes after hydraulic test, to scour out deposits, or as dividers in a line when a different type of petroleum product is to be piped through the same line. The plugs are made of polyethylene foam, which is resistant to petroproducts, natural gas, and oxygen. The foam weighs 35 to 40 kg/m³. For pipes of 350 to 1000 mm, the plugs are made of several cylindrical wafers 300 to 350 mm thick. Plugs for smaller pipes are generally one-piece or two. The plugs are slightly over the diameter of the pipe in which they are to be used, and the pressure of both the driving and the driven fluid provides the necessary tightness.

Card 1/2

L 17523-65

ACCESSION NR: AP5002653

against the walls of the pipe. Tests show that the plugs can move well through gate valves. About 50 plugs were tested. One plug was driven 600 km by water, during a hydraulic test, to scavenge the air and clean the inside of a 1020 mm pipe. In another test, the hydraulic-test water was completely driven out of a 12-km length of 720-mm dia pipe. Plugs can be used to drive water out of submerged pipes. In one case natural gas from the main was used as a driving fluid. Tests indicate that monolithic plugs would be better, since layered plugs tend to separate and become damaged. (Orig. art. has 4 figs.

ASSOCIATION: VNIIST

SUBMITTED: 00

NO REF SOV: 000

ENCL: 00

OTHER: 000

SUB CODE: IE, MT

JPES

Card 2/2

Translation: This inventor's certificate has been issued for a separator used for sequential pumping of various types of petroleum products through one pipeline, elimination of air or water from pipelines in the case of hydraulic testing and cleaning out the cavities of pipelines. The device is a piston which is located in the pipeline. In order to make a closer fit between the divider and the internal surface of the pipeline, to increase the area of contact and reduce the weight of the divider, the device is made in a solid cylindrical or spherical shape of soft, porous oil-resistant plastics or the polyurethane foam type. Orig. art. has: 1 figure.

Card 1/2

L 40767-65

ACCESSION NR: AP5012329

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu

DEMIAN, H.; DEMIAN, E.

Sedimentological research regarding the zone of the Palaeogene-Upper Cretaceous Flysch and Miocene Molasse between the Talsia Valley and Busau Valley. Dars seama sad 49 pt. 1: 361-382 '61- '62 [publ. '64].

1. Submitted April 28, 1961.

DINIAN, E.

Sedimentological research regarding the zone of the Paleogene-Upper Cretaceous Flysch and Maastrichtian deposits in the Latale Valley and Buzau Valley. Data source and 49 pt. 1 361-382 '61-'62 [publ. '64].

1. Submitted April 28, 1961.

DMIC, Bogdan

Unification of the technological process in the transport
between railroads and industry. Pt.1. Zeleznice Jug 19 no.8:
41-51 Ag '63.

DIMIC, Bogdan

Unifying technological processes in the execution of transport
between railroads and industries. Zeleznice Jug 19. 1963.
0'63.

DIMIC, Bogdan

Unification of technological processes in carrying out
transport services between railroads and industry. Pt.1.
Zeleznice Jug 19 no.9:42-48 S '63.

DIMIC, D.

Creating a forest belt around Sarajevo. p. 36.
(Sumarski List, Vol. 81, No. 1/2, Jan./Feb., 1957, Zagreb, Yugoslavia)

SO: Monthly List of East European Accessions (EEAL) Lc. Vol. 6, N^o. 8, Aug 1957, Uncl.

MUDRIC, Vera; DIMIC, Emilija; DEVIC, Jovanka

Tetanus in neonatorum. Med. pregl. 17 no.10:585-587 '64.

1. Klinika za infektivne bolesti Klinicke bolnice u Novom Sadu
(V.d. nacelnika: dr. Hedviga Ognjanovic-Faith).

YUGOSLAVIA/Nuclear Physics - Installations and Instruments.
Methods of Measurement and Research.

C

Abs Jour : Ref Zhur Fizika, No 11, 1959, 24363

Author : Vucic, Vlastimir, M., Dimic, Gojko

Inst : -

Title : Ionization Chamber with Electronic Device for the Measurement of Very Low Concentrations of Ra in Rooms.

Orig Pub : Publ. Elektrotehn. fak. Univ. Beogradu. Mat. i fiz.,
1958, No 22, 11 s., 11.

Abstract : Description of an ionization chamber with a dc amplifier, intended for the measurement of very low concentrations of radium in rooms. The volume of the chamber is considerably increased in order to maintain the ionization current sufficient for stable and reliable operation of the dc amplifier. The chamber is installed stationary in the room in which the concentration of radium is measured.

Card 1/1

- 14 -

DIMIC, J.M.

Fundamentals of ophthalmologic diagnosis in domestic animal

Beograd, Maučna Knjiga, 1952 80p

YUGOSLAVIA/Diseases of Farm Animals - Diseases of Unknown
Etiology.

R-3

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54964.

Author : Dimic, J. M.

Inst :

Title : Periodical Ophthalmia in Horses in the Light of Clinical
and Legal Points of View.

Orig Pub: Veterin. glasnik, 1957, II, No 5, 504-514.

Abstract: The etiology of periodical ophthalmia (PO) is not as yet
clear. It is assumed that leptospirosae are causative
agents of the disease; however, serological examinations
aimed at establishing leptospirosis in horses suffering
from an acute form of PO produced negative results in
20 percent of the cases, while healthy animals, on the
other hand, not infrequently react positively to such

Card : 1/2

23

YUGOSLAVIA/Diseases of Farm Animals. Diseases of Unknown
Etiology.

R-3

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54964.

tests. Boem's and Zupperer's investigations are of interest. These authors found *Onchocerca cervicalis* in various parts of the eye in 78 percent of the horses afflicted with PO. For treating PO, atropin together with anodyne, desinfectants and astringents are most frequently used, as well as bloodletting and laxatives, and finally, riboflavin. The author treated PO by injecting aureomycin or omnacyllin into the anterior chamber of the eye. In this manner it was possible to preserve the horse's vision for more than 1 year. Treatment methods are described.

Card : 2/2

DIMIC, Mileva, dr.

BORDOSKI, Marko, Dr.; ANTUNOVIC-MIKACIC, Smilja, dr.; DIMIC, Mileva, dr.

Leptospirosis in Serbia. Higijena, Beogr. 7 no.1-4:118-125
1955.

1. Higijenski institut NES, Beograd.
(LEPTOSPIROSIS, epidemiol.
in Yugosl. (Ser))

DIMIC, M. dr.; POPOVIC, D., dr.; KARAJOVIC, D., dr.

Diagnostic problems in occupational asthma. Med. glas. 18 no.3:
76-79 Mr-Apr '64.

1. Institut za medicinu rada Socijalističke Republike Srbije u
Beogradu (Direktor: prof. dr. D. Karajovic).

YUCO 61

7. Saba viral, rickettsial and leptospiral infections diagnosed in Serbia
 A. L. Terzin, M. N. Radjicki, M. V. Milovanovic, I. V. Simekovic,
 and M. M. Dunic (J. Hyg., Lond., 1954, 52, 129-150). An analysis
 is given of the serological tests performed over a period of 15 months
 with viral, rickettsial, and leptospiral antigens. Two hundred
 material is made up of about 9400 tests performed on 4036 samples of
 serum obtained from 2430 patients and 598 animals. The incidence
 of the various diseases, the distribution of the positive results
 according to diseases, and the height of the specific titres, as well as
 the height of the residual titres found in the material, are discussed
 and analyzed. M. E. (Lancet) 1954

DIMIC, Milos, dr.; ANICIC, Slavoljub, dr.

Significance of the diagnosis of respiratory tract obstruction and the determination of the residual volume in the early diagnosis of pulmonary emphysema. Med. glas, 19 no.1:15-20 Ja '65.

1. Institut za medicinu rada SR Srbije (Zamenik direktora: doc. dr. M. Kilibarda).

L 04132-67 RO

ACC NR: AP6020779

(A)

SOURCE CODE: YU/0020/65/000/05-/0034/0038

AUTHOR: Dimic, Mirosljub (Graduate engineer; Electronics laboratory assistant)

ORG: "Boris Kidric" Institute of Nuclear Research, Vinca (Institute za nuklearne nauke "Boris Kidric")

TITLE: UKN-1, a device for the control of contaminated footwear

SOURCE: Nuklearna energija, no. 5-6, 1965, 34-36

TOPIC TAGS: radioactive contamination, radiation detecting device, radiation counter, gamma radiation, beta radiation

ABSTRACT: An assembly measuring footwear contamination by gamma and beta radiation having energies higher than 10 keV or 0.3 MeV, with automatically compensated background activity is described. The paper presents the circuit diagrams, describes the operation of the device, and discusses the experience gathered during the past use of the device. The measuring range is up to 100,000 imp/min and it can be extended. Orig. art. has: 5 figures and 1 table.

SUB CODE: 18/ SUBM DATE: none

Cord 1/1

YUGOSLAVIA

R. DIMIC [Affiliation not given.]

"Cobalt as Animal Nutrient."

Belgrade, Veterinarski Glasnik, Vol 17, No 5, 1963; pp 439-441.

Abstract : Brief discussion of literature, including Serbian report on Co content in 6 pasture fields, Soviet on "akocobaltosis" in sheep, Australian speculations on role of Co in adrenal function; discursive outline of symptoms in cattle; therapy is 10 to 40 mg. per os, not i.v. Photograph of heifer 'before and after'; 3 Yugoslav, 4 Western references.

1/1

DIMIC, Viktor, dipl. inz.

Control instruments of a nuclear reactor. Automatika 5
no.4:305-307 '64.

1. Jozef Stefan Nuclear Institute, Ljubljana, Jamova 39.

L 12918-63

BDS/EWT(1)/ENG(x)/ES(w)-2
SSD P2-4/Pab-4/P1-4/Po-4

AFPTC/ASD/ESD-3/AFWL/
AT/IJP(C)

ACCESSION NR: AP3000511

S/0020/63/150/002/0279/0282

AUTHOR: Dinichev, V. F.; Matyukhin, V. D.

TITLE: Investigation of properties of fast plasmoids

SOURCE: AN SSSR Doklady, v. 150, no. 2, 1963, 279-282

TOPIC TAGS: fast plasmoid, plasmoid property

ABSTRACT: In connection with the problem of filling magnetic traps with hot plasma, the properties of plasmoids obtained by means of a coaxial electrodynamic injector have been experimentally investigated. The injector's operational mode, which determines the speed, energy, momentum, and other properties of the plasmoid, was governed by the initial voltage across the capacitor bank U_0 , the quantity of gas M , the kind of gas injected, and the delay time Δt between the injection and the gas discharge. The initial voltage was varied from 3 to 15 kv; Δt , from 150 to 250 microsec; and M , from 0.1 to 1.2 cm³ at atmospheric pressure. Hydrogen, deuterium, and helium were used. By means of magnetic probes it was found that the first discharge of gas takes place in the region of the injector openings. The plasmoid generated leaves the injector with a velocity which depends on U_0 and M . In certain modes characterized by a small quantity of injected gas, the

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L 12918-63

ACCESSION NR: AP3000511

2
 plasmoid splits into two or more separate plasmoids, each traveling with a different velocity. The momentum, energy, and velocity of plasmoids were measured simultaneously. The average masses, densities, and total number of particles were calculated from these quantities and were found to be in good agreement with data obtained by thermal probing techniques. Spectroscopic measurements were made only at such modes where the plasmoids had comparatively small velocities (10^7 cm/sec) and high plasma densities. No separation of plasmoids at such modes was observed. This article was presented by Academician L. A. Artsimovich, 9 Nov 1962. "In conclusion the authors express their thanks to Academician L. A. Artsimovich and to A. M. Andrianov for their unchanging interest in the work and for discussion of the results." Orig. art. has: 4 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 30Oct62

DATE ACQ: 12Jun63

INCL: 00

SUB CODE: PH

NO REF SOV: 002

OTHER: 004

Card 2/2

DIMIDENKO, T.T.; PETRENKO, M.I., kandidat sel'skokhozyaystvennykh nauk.

Dense stands of corn in the Ukrainian S.S.R. Zemledolie 4 no.11:
75-78 N '56. (MLRA 10:2)

1. Chlen-korrespondent Akademii nauk USSR. (for Demidenko).
(Ukraine--Corn (Maize))

DIMIDOV, V. S.

8/089/62/013/006/019/027
B102/B186

AUTHORS: G. T. and M. R.

TITLE: Nauchnaya konferentsiya Moskovskogo inzhenerno-fizicheskogo instituta (Scientific Conference of the Moscow Engineering Physics Institute) 1962

PERIODICAL: Atomnaya energiya, v. 13, no. 6, 1962, 603 - 606

TEXT: The annual conference took place in May 1962 with more than 400 delegates participating. A review is given of these lectures that are assumed to be of interest for the readers of Atomnaya energiya. They are following: A. I. Leypunskiy, future of fast reactors; A. A. Vasil'yev, design of accelerators for superhigh energies; I. Ya. Pomeranchuk, analyticity, unitarity, and asymptotic behavior of strong interactions at high energies; A. B. Migdal, phenomenological theory for the many-body problem; Yu. D. Pivovarskiy, deceleration of medium-energy antiprotons in matter; Yu. M. Kogan, Ya. A. Iosilevskiy, theory of the Mössbauer effect; M. I. Ryazanov, theory of ionization losses in nonhomogeneous medium; Yu. B. Ivanov, A. A. Rukhadse, h-f conductivity of subcritical plasma;

Card 1/4

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S/089/62/013/006/019/027
B102/B186

Nauchnaya konferentsiya...

Ye. Ye. Lovetskiy, A. A. Rukhadze, electromagnetic waves in nonhomogeneous plasma; Yu. D. Kotov, I. L. Rozental', the origin of fast cosmic muons; Yu. M. Ivanov, muon depolarization in solids; V. G. Varlamov, Yu. M. Grashin, B. A. Dolgoshein, V. G. Kirillov-Ugryumov, V. S. Roganov, A. V. Samoylov, μ^- capture by various nuclei; V. S. Demidov, V. G. Kirillov-Ugryumov, A. K. Ponomov, V. P. Protasov, F. M. Sergeyev, scattering of π^- mesons at 5 - 15 Mev in a propane bubble chamber; S. Ya. Nikitin, M. S. Aynutdinov, Ya. M. Selektor, S. M. Zombkovskiy, A. F. Grashin, muon production in π^+p interactions; B. A. Dolgoshein, spark chambers; N. G. Volkov, V. K. Lyapidevskiy, I. M. Obodovskiy, study of operation of a convection chamber; K. G. Finogenov, production of square voltage pulses of high amplitudes; G. N. Alekseev, problems of color vision; V. K. Lyapidevskiy, relation between number of receivers and number of independent colors; Ye. M. Kudryavtsev, N. M. Sobolev, M. I. Tisengausen, L. M. Tunitskiy, P. S. Fayzulov, determination of the moment of electron transition of oscillator forces and the widths of the Schumann-Runge bands of molecular oxygen; E. Ye. Gavrilov, A. V. Zharikov, V. I. Rayko, decomposition of the volume charge of intense ion beams; Ye. A. Krauer-Ageyev, V. S. Troshin, measurement of neutron spectra; G. G. Doroshenko, new methods of fast-neutron recording; V. I. Ivanov, dosimetry terminology; R. M. Voronkov, Card 2/4.

DIMIDOVA, Ye.I.; NEVZOROVA, L.V.

Vertical distribution of water in stratus and its relation
to the temperature at the cloud base. Trudy TSO no.47:
96-100 '63. (MIRA 18:12)

DIMIKOV, B. (Bolgariya)

~~-----~~ A ball-bearing remover. Stan. 1 instr. 26 no.7:34 J1 '55.
(Ball bearings) (MLRA 8:9)

DIMIN, O.L.

"Philosophical problems in medicine." Collection of articles edited
by G.I.TSaregorodtsev, F.G.Mikhailov, A.D.Ado. Reviewed by O.L.
Dimin. Sov.zdrav. 21 no.7:75-76 '62. (MIRA 15:8)
(MEDICINE--PHILOSOPHY) (TSAREGORODTSEV, G.I.) (MIKHAILOV, F.G.)
(ADO, A.D.)

DIMINSKIY, K.

Hydraulic method of protecting the pressure recorders of a
consistometer. Rech. transp. 24 no.11:47 '65. (MIRA 19:1)

1. Institut gidromekhaniki AN UkrSSR.

SILIN, Nikolay Aleksandrovich; PISHCHENKO, Ivan Akimovich;
DIMINSKIY, Karol' Viktorovich; KONDAKOV, Vyacheslav
Nikolayevich; STOVBEUN, Ivan Iosifovich; ROZOVSKIY,
Izrail' L'vovich, doktor tekhn. nauk, otv. red.;
MEL'NIK, T.S., red.; TURBANOVA, N.A., tekhn. red.

[Instruments for measuring parameters of hydraulic
conveying of solid materials] Pribory dlia izmereniia
parametrov gidrotransportirovaniia tverdykh materialov.
[By] N.A.Silin i dr. Kiev; Izd-vo AN USSR, 1963. 197 p.
(MIRA 17:3)

Dimitov, G.

(13)

Medic, Veterinarni Sbornik, Vol. 21, No. 4, 1961

1. "Epidemiologic Diagrams of Sporadic," M. I. Dimitov (Assistant
at the Institute of Veterinary Medicine), pp. 6-10.
2. "A Case of Anisakidosis in Man," G. Dimitov, G. Dimitov, and
M. I. Dimitov (Institute of Veterinary Medicine), pp. 11-12.
3. "Anisakidosis of Man as a Disease Against Some Parasites," G. Dimitov,
G. Dimitov, and M. I. Dimitov (Institute of Veterinary Medicine), pp. 12-13.
4. "Anisakidosis of Man as a Disease Against Some Parasites," G. Dimitov,
G. Dimitov, and M. I. Dimitov (Institute of Veterinary Medicine), pp. 13-14.
5. "A Case of Man Anisakidosis in Man," G. Dimitov (Institute of Veterinary
Medicine), pp. 14-15.
6. "Anisakidosis of Man (Preparation of Some Parasites from the
Man's Body) Upon Reproductive Ability in Man," G. Dimitov and M.
I. Dimitov (Institute of Veterinary Medicine), pp. 15-16.
7. "A Case of Pyelitis in a Child," G. Dimitov, G. Dimitov, and M.
I. Dimitov (Institute of Veterinary Medicine), pp. 16-17.
8. "Anisakidosis in the Human of a Buffalo Cow," G. Dimitov and M.
I. Dimitov (Institute of Veterinary Medicine), pp. 17-18.

Observation not identified.
1. Anisakidosis of Man.

DIMIT' R.

BULGARIA / Chemical Technology. Chemical Products and Their
Application - Fats and Oils. Waxes. Soap. Detergents.
Flotation reagents

J-11

Abs Jour : Referat Zhur - Khimiya, No 2, 1958, 6112

Author : Gerasimov Mikhail, Rusachev Dimit' R

Inst : Not given

Title : The Possibility of Organizing the Production of Flotation
Reagents in Bulgaria

Orig Pub : Tezhka prom-st, 1957, 6, No 3, 33-36

Abstract : It is pointed out that production of flotation reagents
(F) is of great economic importance in some branches of
Bulgarian industry, in particular in metallurgy of non-
ferrous metals (Zn, Sn). Cheap sources of raw materials
are enumerated, on the basis of which the production of F

Card 1/2

VELEV, D.; KOHEV, K.; DIMITRACHKOVA, Z. [Dimitrachkova, Zh.]

A criterion for establishing the technical and economic advantages of seepage control measures. Doklady BAN 15 no.8:849-852 '62.

KOCHEV, K.; DIMITRACHKOVA, Zh.

Method of determining technical and economic advantages
of covered channel pipelines. Izv Inst vodni probl 2:51-71
'64.

1ST AND 2ND ORDERS										100 AND 4TH ORDERS									
<i>MITROZELAS</i> <i>S A</i> <i>BS 621 C</i> 2388. Consideration of sun-donor effect of atmosphere reaction to the electron activation of direct-current cathodes. <i>Donnan, A. B. - Electrochemistry (No. 5) 52- (Aug., 1948) in Journal - A brief analysis. W. W. G. 621.311.2:621.316.117</i> <i>Chem. Tech. Sci.</i> ASR-SLA METALLURGICAL LITERATURE CLASSIFICATION																			
100000 00 100000 00										100000 00 100000 00									

DIMITRADZE, A.S.

STEPANOV, Aleksandr Dmitriyevich; DIMITRADZE, A.S., doktro tekhn.nauk, prof.,
retsensent; KAMENETSKIY, B.G., ~~red.~~ tekhn.nauk, red.; EL'KIND, V.D.,
tekhn.red.

[Ways of increasing transmission efficiency in diesel and gas-
turbine locomotives] Puti povysheniia effektivnosti peredachi
teplovozov i gazoturgovozov. Moskva, Gos. nauchno-tekhn.
izd-vo mashinostroit. lit-ry, 1957. 127 p. (MIRA 11:5)
(Locomotives)

SHAPIRO, O.N., dots., kand. tekhn. nauk; DIMITRADZE, A.S., doktor
tekhn. nauk, prof., red.

[Electrical engineering; lecture on the section "Three-
phase electrical networks"] Elektrotehnika; lektsiia po
razdelu "Elektricheskie tsepi trekhfaznogo toka." Moskva,
Gos.izd-vo "Vysshiaia shkola," 1960. 28 p. (MIRA 17:4)

DIMITRADZE, Apollon Samsonovich, prof., doktor tekhn. nauk;
GOROKHOVA, S.S., tekhn. red.

[Electrical engineering; lecture on the course
"Asynchronous electrical machines"] Elektrotehnika;
lektsiia po razdelu "Asinkhronnye elektricheskie mashiny."
Moskva, Vysshaia shkola, 1960. 44 p. (MIRA 17:3)

ACC NR: AP6021473

SOURCE CODE: UR/0413/66/000/011/0094/0094

INVENTOR: Zhuravel', V. I.; Minakov, V. I.; Bobrov, V. T.; Dimitraki, P. N.; Niki-forenko, Zh. G.; Budenkov, G. A.; Gitis, M. G.

ORG: None

TITLE: An ultrasonic pulse-shadow immersion flaw detector. Class 42, No. 182390 [announced by the All-Union Scientific Research Institute of Nondestructive Methods for Material Quality Control (Vsesoyuznyy nauchno-issledovatel'skiy institut neraz-rushayushchikh metodov kontrolya kachestva materialov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 94.

TOPIC TAGS: flaw detection, ultrasonic flaw detector, quality control

ABSTRACT: This Author's Certificate introduces: 1. An ultrasonic pulse-shadow immersion flaw detector which contains an ultrasonic probe unit, line scanning mechanism, oscillator and ultrasonic amplifier. The unit is designed for increased productivity in checking parts of complex shape. The installation incorporates an electronic unit which generates a control signal after the ultrasonic probe unit passes beyond the outline of the part being checked. This signal controls the line scanning mechanism and temporarily disconnects the receiving head from the amplifier. 2. A modification of this flaw detector in which the electronic unit is made in such a

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UDC: 620.179.16.C8

ACC NR: AP6021473

way that when there is a single pair of ultrasonic probes in the installation the receiver head is disconnected from the amplifier during the period when the probe unit is returning to the article being checked. 3. A modification of this flaw detector in which the electronic unit is made in such a way that when there are two pairs of ultrasonic probes located one behind the other along their line of motion in the installation, the receiver head disconnected from the amplifier is the one which first passes beyond the outline of the part being checked. This receiver head is connected when the second pair of probes passes beyond the outline of the part on the return travel of the probe unit.

SUB CODE: 09, 13/ SUBM DATE: 07Dec64

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KHRISTIN, L.^g, prof.; TSHETSETSKAYA, Ye.K.; DIMITRASHKO, V.I.

Epidermophytosis in combination with other lesions of the skin.
Vest.derm.i ven. 35 no.5:63-64 '62. (MIRA 15:5)

1. Iz kliniki kozhno-venericheskikh bolezney Stanislavskogo meditsinskogo instituta.
(DERMATOMYCOSIS) (SKIN--DISEASES)

EXCERPTA MEDICA Sec 13 Vol 13/10 Dermatology Oct. 59

2813. CLINICAL FEATURES, PATHOGENESIS AND TREATMENT OF A CASE
OF VENEREAL GRANULOMA - Considerații clinice, etio-patogenice și
terapeutice în legătură cu un caz de granulom venerian - Dimitrescu A. -
DERM.-VENER. (București) 1958, 3/4 (339-346) illus. 3

The case reported refers to a man aged 63 yr. who for more than 25 yr. had been
suffering from a venereal granuloma with lesions localized in both groins and in
the right loin. The patient was treated with antibiotics (streptomycin, chlortetra-
cycline and oxytetracycline), followed by specific vaccinothervapy and diathermal

DIMITRESCU, C.

A method of calculating the mechanism of hammer mills. p. 96.
(INDUSTRIA CONSTRUCTIILOR SI A MATERIALEOR DE CONSTRUCTII. RUMANIA. Vol. 7, no.2
Feb. 1956.)

SO: Monthly List of East European Accessions (EEAL) IC, Vol. 6, no. 7, July 1957. Uncl.

DIMITRESCU, C.

RUMANIA/Safety Engineering. Sanitary Engineering. Sanitation

L.

Abs Jour : Referat Zhur i Khimiya, No 4, 1957, 14266

Author : Dimitrescu C.

Title : Problems of Labor Protection in Planning of Cement Plants

Orig Pub : Ind. constructiilor si mater. constr., 1956, 7, No 5,
310-313

Abstract : Consideration of safety engineering problems

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- 1 -

DIMITRESCU, I.

GOIA, I., Prof.; GLIGORE, V., conf.; DIMITRESCU, I., dr.; FISCHEL, G., dr.;
FLORESCU, I., dr.; GHERMAN, Gr., dr.; FRATILA, I., dr.

Therapy of ulcerous diseases. Med. int., Bucur. 8 no.4:518-
525 Aug 56.

1. Lucrare din Clinica a II-a medicala I.M.F. - Cluj.

(PEPTIC ULCER, therapy

gastric lavage with hypertonic glucose solutions,
evaluation)

(HYPERTONIC SOLUTIONS, ther. use

glucose solutions in gastric lavage for peptic ulcer)

GLIGORE, V., dotsent, doktor; GERMAN, G.; DIMITRESKU, I.; BACHU, T.; CHOFU, G.;
KUTUSH, K.; FENETE, T.

Problem of peptic ulcer in elderly people. Klin.med. 37 no.10:41-44
O '59. (MIRA 13:2)

1. Iz 2-y meditsinskoy kliniki (zaveduyushchiy - prof. doktor I.Goya)
Mediko-farmatsevticheskogo instituta g. Kluzh.
(PEPTIC ULCER in old age)

GOJA, I., prof.; GILGORE, V., conf.; CHIRTOC, Gh., dr.; DIMITHESCU, I.,
dr., . . .

A new method of establishing a differential diagnosis between
gastric ulcer and cancer. Med. inter., Bucur 13 no.5:733-748
My '61.

1. Lucrare efectuata in Clinica a II-a medicala, Cluj.
(PEPTIC ULCER diagnosis) (STOMACH NEOPLASMS diagnosis)
(GASTRITIS diagnosis) (GLUCOSE pharmacology)

GLIGORE, V., conf.; DIMITRESCU, I., dr.

Contribution to the study of painful epigastric syndromes in association with intermittent gastric volvulus. Med. intern. 14 no.4:433-443 Ap '62.

1. Lucrare efectuata la Clinica a II-a medicala, I.M.F. Cluj.
(ABDOMEN, ACUTE) (STOMACH VOLVULUS)

GLIGORE, V., conf.; LUCAGIU, Ol., dr.; RUB, D., dr.; DIMITRESCU, I., dr.

Coronary manifestations in cervico-dorsal spondyloses. Med. intern.
14 no.12:1487-1492 D '62.

1. Lucrare efectuata la I.M.F. din Cluj.
(SPINAL DISEASES) (CORONARY DISEASE)

DIMITRESCU, I. SUCITULESCU, N.

The use of synthetic tanning materials in the production of sole leather in the
Rumanian People's Republic. Tr. from the Rumanian. (To be contd.) p.49 (Kozarstvi,
Vol. 7, no. 2 Feb. 1957) Praha

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6 no. 7 July 1957. Uncl.

DIMITRESCU, I. SUCITELESCU, N.

Use of synthetic tanning materials for the production of sole leather in the Rumanian People's Republic. Tr. from the Rumanian. p.74 (Kozarstvi, Vol 7, no. 3, Mar. 1957)
Praha

SO: Monthly List of East European Accession (EEAL) LC, Vol. 6 no. 7, July 1957. Uncl.

KRIVDA, S. [Crivda, S.]; HOZOC, D. [Hozoc, D]; MANULESKU, R. [Manolescu, R];
DIMITRESKU, L. [Dimitrescu, L]; KELUCERU, M. [Calugaru, M.]

Cardiovascular diseases as an aggravating factor in the surgical treatment of prostate adenoma. Urologia no.1:33-37'63.

(MIRA 16:7)

1. Iz 1-oy khirurgicheskoy kliniki (direktor - prof. T.Burgele)
Bukharestskogo meditsinskogo instituta. Bol'nitsa Pandur'.

(PROSTATE GLAND--TUMORS)

(CARDIOVASCULAR SYSTEM--DISEASES)

STEFANACHE, M., ing.; DIMITRESCU, N., ing.

Technical and economical considerations on the transition
from overhand stop working to longwall face in the coal
basin of Filipești de Pădure. Rev min 15 no. 5/6:261-266
My-Je '64.

BLYAKHU, M. [Bliachu, M.]; DIMITRESKU, P. [Dimitrescu, P.]

Outline geology of the western Carpathian Mountains [with summary
in English]. Sov. geol. 2 no.5:25-44 My '59. (MIRA 12:8)

1. Geologicheskii komitet Akademii Rumynskoy Narodnoy Respubliki.
(Carpathian Mountains--Geology)

DIMITRESCU, R.

Rumania/Cosmochemistry. Geochemistry. Hydrochemistry.

D

Abs Jour : Ref Zhur-Khimiya, No 2, 1958, 4157.

Author : Dimitrescu R.

Inst : Not given.

Title : On the Presence of Alkaline Rocks in the Northern Part of Persani Mountains.

Orig Pub : Comun. Acad. RPE. 1957, 7, No 1, 113-116.

Abstract : According to the data of microscopic and chemical analyses, the examined rocks appear to be trachytes and basaltic porphyries with sanidine phenocrysts.

DIMITRESCU, R.
RUMANIA // Physical Chemistry. Thermodynamics. Thermo-chemistry. Equilibria. Phase Transitions. Physico-Chemical Analysis. B

Abs Jour: Ref Zhur-Khimiya, No 20, 1959, 70734.

Author : Pavolescu, L.; Dimitrescu, R.
Inst : Academy of Geology RPR.
Title : Mineralogical Investigation of Metallurgical Slags in the Industrial Plant of Calan.

Orig Pub: Studii si cercetari geol. Acad. RPR, 1958, 3, No 3-4, 207-214.

Abstract: In the mineralogical research of some specimens of old blast-furnace slags, the following mineralogical parageneses were identified: melilite slags (ackermannite, ackermannite plus pseudo-wollastonite, helenite plus forsterite), diopside slags (diopside plus helenite, diopside plus wollastonite), rankinite slags (rankinite), wollastonite slags (iron-containing wollastonite,

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